# Contraceptives



- Recent months have seen two important new pieces of information which add to our understanding of the safe use of combined oral contraceptives (COCs).
- Two observational studies reported increased risk of VTE with Yasmin.
- New guidance on drug interactions with hormonal contraception advises that women taking COCs no longer require additional contraceptive precautions during or after a course of antibacterials for three weeks or less, with the exception of rifabutin and rifampicin.
- Contraceptives may only be prescribed on States prescription when used for the management of gynaecological conditions, when the doctor endorses the prescription "for treatment" and when the intended product is listed in the Prescribing List.

#### A. Yasmin

Two observational studies, one from the UK and another from the US, found a two to three-fold increased risk of venous thromboembolism associated with the use of COCs containing drospirenone (e.g. Yasmin) compared with COCs containing levonorgestrel. The incidence of VTE in the populations studied was 20-30 cases per 100,000 women-years of use with Yasmin, compared with 10 cases per 100,000. However the risk of VTE remains much less than that associated with pregnancy, which is about 60 cases per 100,000 pregnancies.

The MHRA advised in March 2010 that VTE risk with Yasmin may be slightly higher than previously estimated. In light of the latest information the agency has now advised that

- COCs containing levonorgestrel have the **lowest thrombotic risk** and are the **safest COC** for a woman who wishes to start or to switch oral contraception.
- There is no reason for women to stop taking COCs containing drosperinone or indeed any other COC on the basis of these findings.

The National Prescribing Centre reviewed the available evidence in 2010 and advised that there is no conclusive evidence that Yasmin is clinically superior to other COCs with regard to non-contraceptive effects e.g. fluid retention, weight gain, skin conditions or premenstrual symptoms. It does however offer another choice, but should not now be prescribed first line.

Yasmin is relatively expensive, at £63.70 plus fees and grants for a year's supply, if prescribed for treatment. Other COCs cost from £6.46 to £27.95.

## B. Drug interactions with hormonal contraception

#### 1. Antibacterials

New advice from the Faculty of Sexual and Reproductive Healthcare advise that women taking COCs no longer require additional contraceptive precautions during or after a course of antibacterials for three weeks or less, with the exception of rifampicin or rifabutin.

In line with WHO and US guidance, additional contraceptive measures are now only recommended when prescribing liver enzyme-inducing antibacterials, as they have consistently been shown to reduce serum levels of ethinyloestradiol. However if the antibacterial, or the illness itself causes diarrhoea and vomiting, then additional measures are still required.

#### 2. Other enzyme-inducing drugs

All women commencing enzyme-inducing drugs should be advised to use a reliable contraceptive method unaffected by enzyme inducers, such as progesterone-only injectable, copper-bearing intrauterine device or levonorgestrel-releasing intrauterine system.

### 3. Coumarin anticoagulants e.g. warfarin

The use of oestrogens and/or progestogens has been associated with both increased and decreased anticoagulant effect of coumarin anticoagulants. Given the lack of consistent evidence, it is the current opinion of the National Prescribing Centre that a true interaction is unlikely.

#### 4. Lamotrigine

New evidence suggests that COCs should not usually be recommended in women on lamotrigine monotherapy due to the risk of reduced seizure control while taking a COC and the potential lamotrigine toxicity in the COC-free week. The clinical significance of this interaction is unknown and Obviously further evidence will be required before altering existing recommendations.

#### Prescribing of contraceptives on States prescriptions

Contraceptives may only be prescribed on States prescription when used for the management of gynaecological conditions, when the doctor endorses the prescription "for treatment" and when the intended product is listed in the Prescribing List.

In the year ending July 2011 there were 6.323 prescription items issued for contraceptive products used for gynaecological treatment. The cost was £42,827 excluding fees and grants.

### In summary

- The MHRA has advised that levonorgestrel containing combined oral contraceptives are recommended first line for women changing or stopping contraception.
- There is no evidence that Yasmin is clinically superior to other products in terms of reduced side effects
- It is associated with two to three -fold increased risk of VTE compared with older COCs, but the risk of VTE in pregnancy is 2-3 times higher again.
- Women on COCs who are prescribed a non-enzyme inducing antibiotic for less than three weeks
  no longer need to use additional contraceptive methods.
- However additional methods remain recommended if the illness and/or the antibiotic causes significant vomiting or diarrhoea.

Reference: National Prescribing Centre www.npci.org.uk

If you have any comments or observations on the contents of this bulletin, or if you have ideas or suggestions for future bulletins please contact

Geraldine O'Riordan, Prescribing Advisor Tel: 01481-732460